



8888 University  
Drive,  
Burnaby, BC  
Canada V5A 1S6

TEL: 778.782.6654 avpacad@sfu.ca

FAX:  
778.782.5876

www.sfu.ca/vpacademic

## MEMORANDUM

ATTENTION FROM Senate  
Wade Parkhouse, Chair  
Senate Committee  
on Undergraduate  
Studies  
RE: New Course Proposals

DATE May 8, 2020  
PAGES 1/2

**For information:**

Acting under delegated authority at its meeting of May 7, 2020 SCUS approved the following curriculum revisions effective Spring 2021.

**a. Faculty of Applied Sciences (SCUS 20-38)**1. School of Mechatronics Systems Engineering

- (i) New Course Proposal: MSE 412-3, Neuromodulation Technologies and Applications in Brain Health

**b. Faculty of Environment (SCUS 20-39)**1. Department of Archaeology

- (i) New Course Proposals:
- ARCH 105-3, The Past in the Present: Archaeology in Popular Culture
  - ARCH 374-4, Research Design in Archaeology

2. Department of Geography

- (i) New Course Proposal GEOG 365-4, Race, Resistance & Urban Space

**c. Faculty of Science (SCUS 20-40)**

1. Department of Biomedical Physiology and Kinesiology

(i) New Course Proposals:

- BPK 411-3, Advanced Topics in Vascular Physiology
- BPK 447-3, Neuroplasticity

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Senate Docushare repository at <https://docushare.sfu.ca/dsweb/View/Collection-12682>.

COURSE SUBJECT MSE

NUMBER 412

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation

Neuromodulation Technologies and Applications in Brain Health

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation

Neuromodulation Technology

CAMPUS where course will be normally taught:  Burnaby  Surrey  Vancouver  Great Northern Way  Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

Introduction into neuromodulation technologies and their applications in advancing brain research, augmenting healthy functions, and treating diseases. By covering topics including basics of nervous system, bio-signal processing, existing technologies, safety, regulations and steps in designing and commercializing neuromodulation technology, students are equipped with the know-how to develop a neurotechnology device.

REPEAT FOR CREDIT  YES  NO Total completions allowed  Within a term?  YES  NO**LIBRARY RESOURCES**

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit [www.lib.sfu.ca/about/overview/collections/course-assessments](http://www.lib.sfu.ca/about/overview/collections/course-assessments).

**RATIONALE FOR INTRODUCTION OF THIS COURSE**

By introducing this course, we achieve three key aims: 1) expanding the diversity and number of elective courses in the School of Mechatronic System Engineering, which are currently limited. 2) provide an opportunity for students to learn about a cutting edge field, neuromodulation technologies, that is projected to grow exponentially over the next decade. 3) provide an elective course that enable students apply their theoretical knowledge, and what they learned in the curriculum in the last few years, toward developing technologies that have direct application in changing human conditions and having an impact in the society.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) Spring 2021

Term in which course will typically be offered [ ] Spring [ ] Summer [x] Fall

Other (describe) [ ]

Will this be a required or elective course in the curriculum? [ ] Required [x] Elective

What is the probable enrollment when offered? Estimate: 40

UNITS Indicate number of units: 3

Indicate no. of contact hours: 3 Lecture [ ] Seminar [ ] Tutorial 1 Lab [ ] Other; explain below

OTHER

[ ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Faranak Farzan

WQB DESIGNATION

(attach approval from Curriculum Office)

n/a

PREREQUISITE AND / OR COREQUISITE

MSE 280

**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

n/a

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

n/a

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

n/a

Does the partner academic unit agree that this is a two-way equivalency?  YES  NO

*Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).*

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

n/a

**FEEES**

Are there any proposed student fees associated with this course other than tuition fees?  YES  NO

**COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)**

Remember fundamental concepts about nervous system that would enable monitoring and modulating its function through technologies

Understand the history and key applications of neuromodulation technologies

Understand how to record and analyze nervous system electrical activities with a focus on brain waves

Analyze various design requirements for transcranial neuromodulation and neuromonitoring technologies

Evaluate the design and safety of a neuromodulation technology for application in humans

Understand the key steps involved from designing a device to its commercialization



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

n/a

**OTHER IMPLICATIONS**

Final exam required  YES  NO

Criminal Record Check required  YES  NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

Faranak Farzan

COURSE SUBJECT NUMBER 

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation

CAMPUS where course will be normally taught:  Burnaby  Surrey  Vancouver  Great Northern Way  Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

REPEAT FOR CREDIT  YES  NO Total completions allowed  Within a term?  YES  NO**LIBRARY RESOURCES**NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit [www.lib.sfu.ca/about/overview/collections/course-assessments](http://www.lib.sfu.ca/about/overview/collections/course-assessments).**RATIONALE FOR INTRODUCTION OF THIS COURSE**

Science is under attack in popular media. Archaeology is particularly subject to misuse in popular media, with pseudo-archaeology becoming increasingly bold in its attacks on archaeological data, critical thinking, and the rights of descendant communities globally. In 2019, the best-selling "non-fiction" book was a pseudo-archaeological study of a "lost" ancient civilization, created by a race of giant humans with futuristic technology, which was responsible for all subsequent ancient state level societies. Traditionally, archaeologists have laughed off such far-fetched works as nonsensical and not worthy of attention. With the current social and political climates and the rise of "fake news", archaeologists are now in the position where such works need to be not just debunked, but brought to the attention of an audience of students who need to learn how to critically assess the information they are presented with, and to grasp the underlying intentions and agendas of those who pass on conspiracy theories of lost cultures, lost races, and alien encounters in the past.

The Past in the Present is designed to present issues of critical thinking to a broad audience with little or no prior exposure to real archaeology, and to do so in a fashion both entertaining and informative. This course will use Hollywood blockbusters, pseudo-documentaries, and real documentaries to help students learn to assess the (frequently convincing-sounding) evidence they will face everyday in the real world. The approaches in this course will be useful far beyond the classroom and far beyond archaeological studies, and can (and hopefully will) be applied throughout their future lives.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) SPRING 2021

Term in which course will typically be offered [X] Spring [ ] Summer [X] Fall

Other (describe) [ ]

Will this be a required or elective course in the curriculum? [ ] Required [X] Elective

What is the probable enrollment when offered? Estimate: 100+

UNITS Indicate number of units: 3

Indicate no. of contact hours: 3 Lecture [ ] Seminar [ ] Tutorial [ ] Lab [ ] Other; explain below

OTHER

[ ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

David Maxwell is course developer; all CFL faculty have sufficient expertise to offer this course.

WQB DESIGNATION

(attach approval from Curriculum Office)

[ ]

PREREQUISITE AND / OR COREQUISITE

None





**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

None

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

None

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

None

Does the partner academic unit agree that this is a two-way equivalency?  YES  NO

*Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).*

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

**FEEES**

Are there any proposed student fees associated with this course other than tuition fees?  YES  NO

**COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)**



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

**OTHER IMPLICATIONS**

Final exam required  YES  NO

Criminal Record Check required  YES  NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

David Maxwell



COURSE SUBJECT Archaeology NUMBER 374

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation
Research Design in Archaeology

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation
Arch Research Design

CAMPUS where course will be normally taught: [checked] Burnaby [ ] Surrey [ ] Vancouver [ ] Great Northern Way [ ] Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.
Introduction to writing a research context, creating research questions, developing hypotheses, collecting, recording and analyzing data to address hypotheses, and report writing.

REPEAT FOR CREDIT [ ] YES [checked] NO Total completions allowed [ ] Within a term? [ ] YES [ ] NO

LIBRARY RESOURCES

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit www.lib.sfu.ca/about/overview/collections/course-assessments.

RATIONALE FOR INTRODUCTION OF THIS COURSE

A solid research project requires a sound research design. Our undergraduate students are currently not exposed to this aspect of the research process, which is problematic for a couple of reasons. Those students who enter graduate school find themselves expected to create a research design for their thesis work and need to both learn the process and to complete their own research proposal in a single semester -- a daunting task. Further, many of our students go directly from a Bachelor degree into the consulting world, and for most, graduate school does not become part of their lives. This means that we are producing generations of students who are working on the front lines of archaeology with absolutely no training in creating a proper research design, and results in the generation of data that are not particularly useful in many cases. An undergraduate course in archaeological research design would help to alleviate this problem, providing students with key skills in formulating research contexts, developing general research questions & creating specific hypotheses, and learning how to test these hypotheses to answer research questions. There is no reason that Heritage Resource Management archaeological projects cannot be incorporated into a research context, and students need to learn how to do this.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) SPRING 2021

Term in which course will typically be offered [X] Spring [ ] Summer [X] Fall

Other (describe) [ ]

Will this be a required or elective course in the curriculum? [X] Required [ ] Elective

What is the probable enrollment when offered? Estimate: 30

UNITS Indicate number of units: 4

Indicate no. of contact hours: 2 Lecture 2 Seminar [ ] Tutorial [ ] Lab [ ] Other; explain below

OTHER

[ ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

David Maxwell; Robert Muir; Dana Lepofsky; John Welch

WQB DESIGNATION

(attach approval from Curriculum Office)

[ ]

PREREQUISITE AND / OR COREQUISITE

ARCH 101 (or ARCH 201). Recommended: ARCH 282 (or ARCH 372) and ARCH 271.



**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency?  YES  NO

*Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).*

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

**FEEES**

Are there any proposed student fees associated with this course other than tuition fees?  YES  NO

**COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)**



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

**OTHER IMPLICATIONS**

Final exam required  YES  NO

Criminal Record Check required  YES  NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

David Maxwell



COURSE SUBJECT GEOG NUMBER 365

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation Race, Resistance & Urban Space

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation Race, Resistance & Urban Space

CAMPUS where course will be normally taught: [checked] Burnaby [ ] Surrey [ ] Vancouver [ ] Great Northern Way [ ] Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box. An exploration of how race informs the aesthetics, politics and development of urban space. Examines racial formation in transnational urban contexts, and how cultural production and social movements are utilized to address racial inequities and envision urban futures.

REPEAT FOR CREDIT [ ] YES [checked] NO Total completions allowed [ ] Within a term? [ ] YES [ ] NO

LIBRARY RESOURCES

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit www.lib.sfu.ca/about/overview/collections/course-assessments.

RATIONALE FOR INTRODUCTION OF THIS COURSE

As of now, there are no undergraduate geography courses with a primary focus on racial inequalities. This course would complement existing 'urban' courses (ie. GEOG 261, 264, 364, 385, 424, 442, 449) by exploring the racial geographies of cities. In addition, this course will go in further depth to examine social and cultural processes explored in GEOG 241 such as racial capitalism, settler colonialism, migration, social movements, etc. Importantly, this course will also add capacity to SFU's agenda concerning equity, diversity and inclusion in Geography and in the Faculty of Environment.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) SPRING 2021

Term in which course will typically be offered [X] Spring [ ] Summer [ ] Fall

Other (describe) [ ]

Will this be a required or elective course in the curriculum? [ ] Required [X] Elective

What is the probable enrollment when offered? Estimate: 40

UNITS Indicate number of units: 4

Indicate no. of contact hours: 2 Lecture [ ] Seminar 2 Tutorial [ ] Lab [ ] Other; explain below

OTHER

[ ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Dr. Margaret M. Ramirez; incoming faculty (Fall 2020) Dr. May Farrales

WQB DESIGNATION

(attach approval from Curriculum Office)

[ ]

PREREQUISITE AND / OR COREQUISITE

At least 45 units, including GEOG 100.





**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (place relevant course(s) in the blank below (ex: STAT 100)) **first** may not then take this course for further credit.

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(Place relevant course(s) in the blank below (ex: STAT 100)) will be accepted in lieu of this course.

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (place relevant course(s) in the blank below (ex: STAT 100)) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency?  YES  NO

Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

**FEEES**

Are there any proposed student fees associated with this course other than tuition fees?  YES  NO

**COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)**

In taking this course, students will:

- Develop critical analytics of how racism informs urban life
- Analyze how racism and colonialism are intertwined with capitalism, and how these systems govern urban environments
- Investigate how urban environmental and climate crises are racialized and gendered
- Employ an intersectional lens to explore how urban social movements can address multiple inequities and injustices
- Acquire a language to interpret and discuss how cultural texts can critique and reimagine political, economic and societal structures



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

n/a

**OTHER IMPLICATIONS**

Final exam required  YES  NO

Criminal Record Check required  YES  NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

Margaret M. Ramírez



**COURSE SUBJECT**

**NUMBER**

**COURSE TITLE LONG** — for Calendar/schedule, no more than 100 characters including spaces and punctuation

**COURSE TITLE SHORT** — for enrollment/transcript, no more than 30 characters including spaces and punctuation

**CAMPUS** where course will be normally taught:      Burnaby      Surrey      Vancouver      Great Northern Way      Off campus

**COURSE DESCRIPTION** — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

**REPEAT FOR CREDIT**      YES      NO      Total completions allowed      Within a term?      YES      NO

**LIBRARY RESOURCES**

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit [www.lib.sfu.ca/about/overview/collections/course-assessments](http://www.lib.sfu.ca/about/overview/collections/course-assessments).

**RATIONALE FOR INTRODUCTION OF THIS COURSE**



**SCHEDULING AND ENROLLMENT INFORMATION**

Effective term and year (e.g. FALL 2016)

Term in which course will typically be offered      Spring      Summer      Fall  
                                                                                                 Other (describe)

Will this be a required or elective course in the curriculum?      Required      Elective

What is the probable enrollment when offered?      Estimate:

**UNITS**

Indicate number of units:

Indicate no. of contact hours:      Lecture      Seminar      Tutorial      Lab      Other; explain below

**OTHER**

**FACULTY**

Which of your present CFL faculty have the expertise to offer this course?

**WQB DESIGNATION**

(attach approval from Curriculum Office)

**PREREQUISITE AND / OR COREQUISITE**



**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency?      YES      NO

*Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).*

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

**FEEES**

Are there any proposed student fees associated with this course other than tuition fees?      YES      NO

**COURSE – LEVEL EDUCATIONAL GOALS (OPTIONAL)**



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

**OTHER IMPLICATIONS**

Final exam required            YES            NO

Criminal Record Check required            YES            NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

COURSE SUBJECT NUMBER 

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation

CAMPUS where course will be normally taught:  Burnaby  Surrey  Vancouver  Great Northern Way  Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

Explores how plasticity of the mammalian brain affects development, learning and adaptation, e.g. to blindness, poverty, stress and technology. Reading 2-4 scientific papers/week, students will learn about important context like peer review and strengthen their ability to read and communicate like a scientist.

REPEAT FOR CREDIT  YES  NO Total completions allowed  Within a term?  YES  NO**LIBRARY RESOURCES**

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit [www.lib.sfu.ca/about/overview/collections/course-assessments](http://www.lib.sfu.ca/about/overview/collections/course-assessments).

**RATIONALE FOR INTRODUCTION OF THIS COURSE**

This new course addresses the need for an upper division course in neuroplasticity, a central concept in neuroscience relevant to development, learning, recovery from injury and disease, and aging. It also addresses the need for more upper division neuroscience courses for Behavioural Neuroscience majors.

This course complements but does not significantly overlap with existing upper-division neuroscience courses. For example, it examines the experience-dependent changes to sensory and motor maps in the brain that make possible the sensory-guided motor behaviour discussed in BPK 415 and the rehabilitative processes and interventions that are the focus of BPK 448. Rehabilitation is a major component of BPK 448 but only one of a number of plastic processes covered in the proposed course, so the overlap is minimal.

This course provides students with substantial practice reading, analyzing, critiquing, and communicating about papers and data. Students are taught not only about techniques and mechanisms of plasticity but also about peer review and ethics and constraints of using research animals and human participants. Many assigned papers are technical and dense, but through first working alone, and then in teams, the students uncover the central arguments of the articles. Over 3 offerings as a special topics course, students have found the course difficult but rewarding, noting their increased confidence in approaching the scientific literature and making oral presentations.



SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016) SPRING 2021

Term in which course will typically be offered [ ] Spring [ ] Summer [x] Fall

Other (describe) [ ]

Will this be a required or elective course in the curriculum? [ ] Required [x] Elective

What is the probable enrollment when offered? Estimate: 20-30

UNITS Indicate number of units: 3

Indicate no. of contact hours: [ ] Lecture 3 Seminar [ ] Tutorial [ ] Lab [ ] Other; explain below

OTHER

[ ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Dylan Cooke, Dan Marigold

WQB DESIGNATION

(attach approval from Curriculum Office)

[ ]

PREREQUISITE AND / OR COREQUISITE

BPK 306 or BISC 305



**EQUIVALENT COURSES** [For more information on equivalency, see Equivalency Statements under [Information about Specific Course components.](#)]

**1. SEQUENTIAL COURSE** [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

**2. ONE-WAY EQUIVALENCY** [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

**3. TWO-WAY EQUIVALENCY** [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency?  YES  NO

*Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).*

**4. SPECIAL TOPICS PRECLUSION STATEMENT** [is not hard coded in SIMS.]

Students who have taken BPK 423 Neuroplasticity may not take this course for further credit.

#### FEES

Are there any proposed student fees associated with this course other than tuition fees?  YES  NO

#### COURSE - LEVEL EDUCATIONAL GOALS (OPTIONAL)

1. Effectively communicate the important findings and methods of a scientific paper in a presentation.
2. Analyze and critique scientific papers and graphical data with confidence.
3. Discriminate the most important findings in a scientific paper and describe how they were obtained.
4. Demonstrate metacognition.
  - 4.1 Identify the most important gaps in their own understanding of a paper.
  - 4.2 Formulate questions to address those gaps.
5. Convince themselves and others using data.
6. Write clearly and concisely.
7. Critically evaluate scientific literature on neuroplasticity.
  - 7.1 Critique data collection methods and assumptions.



**RESOURCES**

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

none

**OTHER IMPLICATIONS**

Final exam required  YES  NO

Criminal Record Check required  YES  NO

**OVERLAP CHECK**

Checking for overlap is the responsibility of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

**Name of Originator**

Dylan Cooke